Remarks for: U.S. Sen. John Glenn NASA 50th Anniversary Celebration Sept. 24, 2008

Thank you very much, Leon, for those very kind remarks. You know, I want to squelch one rumor. It's not true that on that last flight NASA would not let me make a spacewalk because they were afraid, at my age, I might wander off someplace. It didn't happen.

I think we should say, NASA, happy birthday! Nobody said that, yet, tonight. Happy birthday, NASA. Happy 50th.

Some of us here this evening were at the beginning of the days of NASA. It was preceded by the old NACA, the National Advisory Committee for Aeronautics. Neil, who you'll hear from in a few moments, I think, even predates me with association there because he was flying for NACA at Cleveland and out in the desert At Dryden even before I became a member of the group.

We go back to where the old headquarters was off the corner of Lafayette Park. That was where NACA was headquartered at that time – a single house over there – and that was the headquarters for NACA.

You know, if you could just stop and say what do we think are a couple of things that made this country great, that let us develop in a very short period of time, in just about 120 years, into the leading nation in the whole world?

Well, if you thought about it for a little while, I think most people would think education – that became general in this country – it was for everybody, it wasn't just for the privileged or for those "kids in the castle" as it might have been in previous ages. But in this country, education came to be for everyone.

But number two, then, would just about have to be the fact that this nation put more into basic research – basic, fundamental learning the new things first. And that's what took us then from a country over here that was separated from most of the rest of the world, and yet we became a world leader in about 120 years.

In my view, the old NACA and its subsequent successor, NASA, just exemplifies what I'm talking about with that.

The Wright brothers in 1903 made the first flight when other nations were trying, also. But following that, our nation decided as a government decided to do basic research in this new era of flight. NACA was formed in 1915 and they looked at airfoils and aerodynamic shapes. It looked at wind tunnels with high and low capacity. They looked at structures and looked at handling characteristics of airplanes and spins and all the things that do with aviation, including such things like metallurgy for engines, so that they became more reliable.

And then, that had a spinoff of its own into such things as even make those metals available for longer-lasting plows on the farms and for new bearings on cars so you didn't have to wait so long to break them in.

What happened next was that the private investment in this country took over with what those facts were that government has sponsored during the old NACA. We had companies come out like Martin and Lockheed and North American and Douglas, Northrop, and of course, Boeing, which became the supplier of airliners to the world and opened whole new vistas that revolutionized world interests with their ability to take people and travel greater distances in a short period of time.

And yet World War II and all the thousands upon thousands of airplanes that used that NACA data to make the world's greatest air forces in whatever service they served in. It all came about because of some of that NACA research work that had been done earlier.

Well, that's the NASA heritage. NACA went out of existence after Sputnik. President Eisenhower decided that we needed somebody to get into this act ourselves. We were behind. And so, it was President Eisenhower that sponsored NASA and it became not NACA but the National Aeronautics and Space Administration. And that was added to the other NASA missions.

And so we started the manned space program exactly 50 years ago, and it was in the depths of the Cold War, and we remember very, very well the Soviets claiming research and technical superiority to the United States. Thousands of students being educated in the Soviet Union and send back to

their countries. And us, trying to play catch up. Their boosters worked and ours, too often were blowing up on the launch pad.

So, they had beat us into orbit. But we did come back. And we came back with Mercury in the suborbital flight in '61, the orbital flight in '62. Gemini taught us how to rendezvous. Apollo, with Neil, made that incredible first step on the moon that that you saw in the footprint a little while ago – I always get Goosebumps every time I see that thing.

In 1973, we had a space lab. And it started real, big-time research. Not just traveling, but big-time research, and started us out on a track of benefits that would benefit us right here on Earth.

In '86 we were reminded of what a dangerous business this can be if we're not careful, when we had the Challenger accident. In '98 we started a space station and later it became the International Space Station with 15 other nations with us. And it because a long-term research into benefits for people right here on Earth, if we just used that new laboratory in space, which we've never had the opportunity to use before.

NASA planned at that time to get into biotechnology, combustion research, fluid physics, fundamental physics, materials science. But in January of '04 the President announced – the President directed – a new mission for NASA. It was to go to the moon and to Mars.

And everybody went along with that. I went along with that. I thought it was great except for one thing – the money didn't follow. We had no plans for new money. And Mike Griffin, who you'll hear from later, was given what I view as an almost impossible job – do everything you're doing now at NASA that has worked out so well for the benefit of this country, but add to it just a couple of little projects like going on to moon and to Mars.

Well, he had no choice but to some things like cutting research in certain areas. So today we have a station up there that's just about to be completed in a year or so. We will have spent have spent just over \$100 billion – that's "b" – but we're not using it for the type research we should use it for because we don't have the money for that.

I've always viewed spaceflight as being for two purposes. Both of them are for research. One is macro research and one is micro research, and I think

they go hand-in-hand, or should, if we're going to get the major benefits out of everything that we do in space.

Macro research is the exploration. Going out farther. Learning how to go to different places. Just to traveling to different places – what we learn from just doing that, and from building the spacecraft and the facilities to go to those different places.

But along with that goes the micro research that I think is equally important. But we have to save more to do any of that research now. We even have to cut out our own transport to the International Space Station for a number of years after we retire the shuttle in 2010.

Well, that sounds a little gloomy but I certainly remain an optimist, even at this late date, to be able to get enough money to restore what I would see as a balanced, and which I believe most people would see as a better balance.

It's an appropriate follow-on to NACA and NASA's past – a past that is also the key to America's future and to America's continued world leadership.

Where we go in exploration is certainly important. But what we learn and benefit from each of those steps along the way will benefit every man, woman and child in our nation, and eventually around the world.

The next 50? Who knows. But I'm convinced it's going to be great.

Happy birthday NASA! Thank you.